

WHAT IS CLAIMED IS:

1. A method, comprising:
receiving from a requesting agent routing information associated with Input
5 Output (IO) traffic; and
arranging for the IO traffic to be transferred directly into a target processor cache
in accordance with the routing information.
2. The method of claim 1, wherein the routing information is received from an IO
10 driver executing at the requesting agent.
3. The method of claim 1, wherein the routing information includes at least one
of: (i) a memory address, (ii) a target processor identifier, (iii) a direct transfer on/off
indication, (iv) a cache allocation/update indication, (v) a routing policy, (vi) a routing
15 condition, (vii) a routing preference, (viii) coherence information, and (ix) an allocation
policy.
4. The method of claim 1, wherein the IO traffic is associated with at least one of:
(i) a network, (ii) a network interface controller, (iii) a disk drive controller, (iv) a
20 peripheral component interconnect interface, (v) a universal serial bus interface, and (vi)
a 1394 interface.
5. The method of claim 1, wherein the arranging is performed in a multi-
processor system that includes a plurality of potential target processor caches.

6. The method of claim 1, wherein the arranging is performed by at least one of:
(i) a direct memory access controller, and (ii) a IO controller hub.

7. The method of claim 1, wherein the IO traffic includes information packets.

5

8. The method of claim 1, further comprising:

receiving the IO traffic; and

determining whether the IO traffic should be stored in system memory or be
transferred directly into the target processor cache.

10

9. The method of claim 1, wherein the routing information indicates that one type
of IO traffic should be transferred directly into the target processor cache while another
type of IO traffic should be transferred directly into another target processor cache.

15

10. The method of claim 1, wherein the IO traffic is received from at least one of:
(i) a network fabric, and (ii) a disk drive, a (iii) a graphics device, and (iv) a peripheral
device.

20

11. The method of claim 1, wherein the IO traffic is transferred into the target
processor cache in accordance with a chipset's platform routing function.

12. An article, comprising:

a storage medium having stored thereon instructions that when executed by a
machine result in the following:

25

receiving from a requesting agent routing information associated with
Input Output (IO) traffic; and

arranging for the IO traffic to be transferred directly into a target processor cache in accordance with the routing information.

13. The article of claim 12, wherein, wherein the routing information is received
5 from an IO driver executing at the requesting agent.

14. The article of claim 12, wherein the routing information includes at least one of: (i) a memory address, (ii) a target processor identifier, (iii) a direct transfer on/off indication, (iv) a cache allocation/update indication, (v) a routing policy, (vi) a routing
10 condition, (vii) a routing preference, (viii) coherence information, and (ix) an allocation policy.

15. An apparatus, comprising:
an input path to receive from a requesting agent routing information associated
15 with Input Output (IO) traffic; and
a processing element to arrange for the IO traffic to be transferred directly into a target processor cache in accordance with the routing information.

16. The apparatus of claim 15, wherein the routing information is received from
20 an IO driver executing at the requesting agent.

17. The apparatus of claim 15, wherein the routing information includes at least one of: (i) a memory address, (ii) a target processor identifier, (iii) a direct transfer on/off indication, (iv) a cache allocation/update indication, (v) a routing policy, (vi) a routing
25 condition, (vii) a routing preference, (viii) coherence information, and (ix) an allocation policy.

18. A method, comprising:

determining at a requesting agent routing information associated with Input
Output (IO) traffic; and

5 providing the routing information to a write agent adapted to arrange for the IO
traffic to be transferred directly into a target processor cache in accordance with the
routing information.

19. The method of claim 18, wherein said provided is performed via an IO driver.

10

20. A system, comprising:

a network fabric;

a network interface controller coupled to the network fabric;

a requesting processor;

15 a target processor having a target cache; and

a write agent, including:

an input path to receive from the requesting agent routing information
associated with Input Output (IO) traffic, and

20 a processing element to arrange for the IO traffic to be transferred directly
into the target cache in accordance with the routing information.

21. The system of claim 20, wherein an IO driver executing at the requesting
processor provides the routing information to the write agent.